

Nursing care for patients with laryngeal cancer: An Integrative Review

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Keywords— *Laryngeal cancer. Nursing care. Oncology.*

Abstract— *Objective: The objective of this research is to map scientific evidence on nursing care for patients with laryngeal cancer. Method: This is an Integrative Literature Review, in which seven articles published between 2007 and 2017 were analyzed. For data analysis, the content analysis technique was used. Results: The findings were categorized into 1) Laryngeal cancer prevention - new perspectives and challenges for nursing; 2) Nursing care for patients with laryngeal cancer; 3) Nursing interventions in the communication of laryngectomized patients; 4) Nursing care with pre and postoperative laryngectomy and prevention of pharyngocutaneous fistulas. Preventive, curative and palliative actions are highlighted, through assessments and dressings of the surgical wound, removal of necrotic tissue, care with tubes, late oral feeding to reduce fistula formation and postoperative care, in order to avoid complications and thus reduce the risk of infections, length of stay, hospital expenses and*

improved quality of life, among other precautions. Conclusion: Preventive actions based on the epidemiological profile of illness are essential to reduce the number of cases and deaths, as well as the early diagnosis of laryngeal cancer. Nursing monitors the entire process from diagnosis, hospital stay, submission to treatments and after all that, rehabilitation and readaptation to a new condition.

I. INTRODUCTION

Cancer is a set of diseases with genetic alterations and epigenetic regulatory mechanisms that result in a malignant phenotype with autonomous proliferation and high molecular heterogeneity, which affects its difficult management. [1] Laryngeal cancer is one of the most frequent diagnostic types to affect head and neck structures, representing approximately 25% of malignant neoplasms that affect this region and 2% of all tumors. Head and neck neoplasms include tumors that affect the nasal cavity, sinuses, mouth, larynx and pharynx. [2]

For Brazil, it is estimated 6,470 new cases of laryngeal cancer in men and 1,180 in women for the year 2020. The estimated risk will be 6.20 cases per 100,000 men, occupying the eighth position; and the 16th most frequent with 1.06 cases per 100,000 women. In Brazil, in 2019, there were 3,985 deaths from laryngeal cancer in men and 547 in women. [3]

The larynx is responsible for three important functions of the human body: swallowing, breathing and phonation, it is divided into three anatomical regions: supraglottis, glottis and subglottis. Treatments for patients with laryngeal cancer can have a great impact and change their quality of life. Therefore, it is necessary to have knowledge for an evidence-based practice, with a humanized scientific foundation, which aims not only at the cure, but also to achieve the complete well-being of the assisted individual. [4]

Although surgery has been the historical basis for localized disease and is still an integral part of the treatment, non-surgical options such as radiotherapy and systemic therapy emerged as viable options, therefore, the action of the nurse in a preventive way, which helps in all treatment and rehabilitation to improve the quality of life. [5]

Thus, this study aims to map scientific evidence on nursing care for patients with laryngeal cancer.

II. METHOD

This is an integrative literature review (RIL), in which the studies were analyzed using descriptive statistics. Articles published between 2007 and 2017, in journals

indexed in the LILACS, SCIELO, PubMed and Cochrane databases, available in full, were included in this study.

For the selection of articles, the terms applied according to the Health Sciences Descriptors (DECS) were used: "laryngeal neoplasm", "oncology", "nursing care" and "palliative care", combined through the "AND" operator.

In addition, the following inclusion criteria were used: articles fully available in Portuguese, Spanish and English, whose research target was the pathology of laryngeal cancer. The following were considered as exclusion criteria: articles that contained more pathologies than laryngeal cancer in their content, citations, records or allusions to any predisposing or clinical factor of laryngeal cancer, course conclusion papers, master's dissertations or abstracts in proceedings.

For data analysis, only studies that were related to the proposed theme were evaluated and selected. Initially, 37 studies were identified, but after reading the abstracts, applying the inclusion and exclusion criteria, seven studies were effectively analyzed for referring in the results to the theme of nursing care for patients with laryngeal cancer.

The Content Analysis technique was used, which encompasses several research techniques that make it possible to describe the content related to the research context through a systematic process, which enables the inference on the collected data. [6]

Therefore, the six steps indicated for the constitution of the integrative literature review were adopted: 1) selection of the research question; 2) definition of study inclusion criteria and sample selection; 3) representation of selected studies in table format, considering all common characteristics; 4) critical analysis of findings, identifying differences and conflicts; 5) interpretation of results and 6) clearly report the evidence found. [6]

III. RESULTS AND DISCUSSION

In this narrative review, 07 original scientific articles were selected that strictly met the previously established sample selection and showed similarities with the object of this study, as shown in table 1:

Table 1: Distribution of studies.

Study	Authors	Title of the article, journal and year of publication	Drawing of the study	Objective	Results Main
1	Santos MCM, Raimundo DD, Soares E, Guedes MTS	Nursing care for patients with laryngeal cancer from the perspective of comprehensiveness: the approach of nurses at INCA. Rev. Cuidado e fundamental. 2015.	Analysis of medical record data	Demonstrate the importance of the concept of Extended Clinic in the health-disease process, from the experience of the professional of Nursing with laryngeal cancer patients.	The importance of the Extended Clinic as a philosophy and tool for working processes in health if back to the production of client-centered care.
2	Santana ME, Sawada NO.	Pharyngocutaneous fistula in cancer patient: implications for Nursing. Rev Latino-am Enfermagem. 2008.	Literature review	Identify the main treatments for pharyngocutaneous fistula after total laryngectomy.	The results showed that the treatment for pharyngocutaneous fistula recommends intensive hygienic care and wound treatment.
3	Freitas AAS, Coelho MJ, Menezes MFB.	Men's Health, masculinities and the relationship with laryngeal cancer: implications for men. R.pesq.:cuid.fundam.online. 2013.	Literature review	Analyze the approach to men's health, masculinities and their relationship with laryngeal cancer in the national scientific production, and the implications for nursing.	Studies indicate actions of prevention and health promotion in different care spaces.
4	Oliveira AP, Amaral JG, Rodriguez AB, Silva MR, Onofre PSC, Silveira EAA.	Nursing process for men with laryngeal cancer based on the Neuman model. Rev. Enfermaria Global. 2017.	Exploratory-descriptive study	Operationalize the nursing process, proposed by Betty Neuman, for men with laryngeal cancer, aiming to identify stressors and coping patterns triggered in the experience of malignant neoplasia.	It was found that the difficulties in the treatment of laryngeal cancer can be solved with a nursing practice focused on attention and dialogue, supported by an adequate scientific method.

5	SalomãoC HD, MeloAS, Carvalho EC.	Uncertainties of patients undergoing total laryngectomy. Rev.EnfermUEPE.2008	Qualitative study	Identify the uncertainties of patients to respect of this therapeutic process.	It is concluded that such patients need more information for better coping the situation in the postoperative period.
6	LenzaNFB , SilvaSL, Sonobe HM, BuettoLS, MartinsL M.	Pharyngocutaneous fistula in cancer patient: implications for nursing. Rev.bras.cancerol. 2013	Literature review	Describe the main implications of the pharyngocutaneous fistula complication to support nursing care.	The fistula pharyngocutaneous is the biggest and most frequent complication in patients undergoing total laryngectomy.
7	Francisca, BP	La Comunicacion:herramienta fundamentalem la calidad de laatencion integral a lospacienteslaringectomizado s.Ver. 2013	Case study	Show the importance of establishing adequate communication as a fundamental tool for comprehensive care of quality with these patients.	Help to nursing team to develop specific care plans and detect day- to-day changed basic needs.

These were organized and categorized into: 1) Laryngeal cancer prevention: new perspectives and challenges for nursing; 2) Nursing care for patients with laryngeal cancer; 3) Nursing interventions in the communication of laryngectomized patients; 4) Nursing care with pre and postoperative laryngectomy and prevention of pharyngocutaneous fistulas; for better presentation and understanding of results.

Laryngeal cancer prevention: new perspectives and challenges for nursing

This category will address the role of nursing in the prevention of laryngeal cancer and strategies to achieve greater reach to the target audience. The public health network benefits from the early detection of cancer, especially when the diagnosis is started in primary care, thus avoiding physical and psychosocial deformities in the individual. [7]

Head and neck cancers are more prevalent in males, due to smoking and drinking habits, as men smoke more and consume alcoholic beverages more frequently and in higher quantities. [8]

State that preventive measures and early diagnosis culminate in the treatment of tumors in early stages and thus can change the current scenario, as there are better chances of cure. As for cases in more advanced stages, a poor prognosis is observed, with shorter survival, despite the treatment. [9]

Given this, for laryngeal cancer to be prevented and diagnosed early, it is necessary for men to be the target of interventions in the field of health policies. The demand for health services by the male public is closely linked to their perception of health care as something not peculiar to masculinity. [10]

Men use health services less often than women and are often slow to seek help, even when they face serious health problems. This can put men at greater risk of developing serious health problems, which in part may explain the higher rates of some serious illnesses in men and shorter lifespans in relation to women. She found that (61%) of men did not participate in regular health check-up appointments, representing a lost opportunity for discussions about preventive health care. [11]

The nurse facing cancer prevention, works from the basic level in health promotion and risk assessment, as well as being aware of the social, emotional and psychological factors that may be linked to the disease. As the majority of the public are men, the disease can generate feelings such as impotence, fear, anxiety, insecurity and the fragility of the disease can undermine their role as provider, generating concern with family income. [12]

Some of the measures that nurses should take for the prevention of laryngeal cancer in primary care are actions aimed at reducing the consumption of alcohol and tobacco, as well as vaccination against the human papilloma virus (HPV), since when staying in the throat increases the risk of infection among people who have oral sex and have multiple partners. Smokers are more susceptible to HPV infections, probably due to the damage caused by smoking to the immune system. [13]

Nursing care to patients with laryngeal cancer

Care is a fundamental nursing activity and patients with laryngeal cancer need humanized care focused on attention and dialogue, based on an adequate scientific method. [14] It is important for nurses to develop a flexible care plan centered on the client, respecting their autonomy with a focus on their recovery and readjustments to their new condition. [15]

Faced with a cancer diagnosis, many changes occur in the individual's life, when it comes to laryngeal neoplasia, there are also changes in their appearance and changes in the way they eat and speak, therefore, many feelings are triggered by the discovery of the disease. [16]

States that the diagnosis and treatment of laryngeal cancer brings with it a great deal of stress. As most of those affected by this pathology are men, they react differently to this emotionally difficult experience. Among the causes of stress are uncertainty about the cure, fear of death, and concerns about supporting your family. [14]

Nursing has experienced difficulties in the daily life of cancer care. In this context, it develops various forms of management so as not to create affective bonds, which is a paradox, as care for people with cancer, at the same time that it mobilizes the most varied emotions, demands a protective behavior and management of feelings and emotions. [17] When nurses demonstrate empathy, they promote a collaborative relationship with patients, which can help to eradicate causes, symptoms or explanations that result in proper diagnosis and appropriate treatments. [18]

Care relationships, despite being everyday, cannot acquire a careless character, but they must always adopt an

empathetic and sensitive posture, seeking to perceive themselves in the other's place, depositing sensitivity in care, therefore, care must be understood as an act that goes beyond technical procedures. [19]

Other nursing interventions are equally important to be mentioned in relation to the patient with laryngeal cancer, such as infection prevention and control, patient safety measures and, for tracheostomized patients, it is important that they receive guidance from the nurse regarding care with the tracheostomy, with a nasogastric tube, oral hygiene, dressing, care with nutrition and effective airway aspiration. [20]

Patient care can be improved by preparing him and his family for the medical, psychological and social repercussions of the treatments received, keeping them updated and aware of their medical condition, by applying appropriate procedures in nursing care and training doctors and nurses on how to adequately respond to the post-surgical needs of their patients. [21]

Nursing interventions in the communication of the laryngectomized patient

The treatment for laryngeal cancer takes into account the stage of disease, which can be chemotherapy, radiotherapy and surgery. In more advanced cases, removal of the larynx (total laryngectomy) is recommended, as a consequence, the patient will have a loss of voice and tracheostomy will be performed, which will have a great impact on the quality of life of the individual, as it impairs their speech. [22] The difficulty of communication among people with laryngeal cancer undergoing total or partial laryngectomy is constant, as, in addition to tracheostomy, generalized facial edema is frequent after surgery due to cervical lymph node resection, which makes the movement of the lips impossible. [23]

Communication is a basic human need, and when it is impaired, it affects the individual's ability to interact with the health team and their families. Although one of the basic nursing instruments is communication, within academic training there is little emphasis on speaking and listening skills, however one cannot think about nursing work without mentioning the importance of the communication process. [24]

State that the ability to listen and speak refers to the nurse-patient relationship, however many factors make this relationship difficult, such as the lack of time to talk to each patient, a tendency to deny feelings due to professionalism and dehumanization. [25] Communication for these patients is a daily struggle, all studies reveal that tracheostomy has a huge impact on communication and quality of life. Thus, communication between

laryngectomized patients and health professionals becomes difficult, generating anxiety and anguish in the client, leaving them frustrated and unable to express their care needs. [26]

In a study carried out in Italy, the authors sought to identify the points of comfort and discomfort of tracheostomized patients and, as a result, identified as points of discomfort the patient's feeling of impotence and frustration for not being able to make themselves understood, communication problems and risk of isolation, on the other hand, they realized that one of the comfort points was feeling reassured when knowing that they could call the nurses at any time, as the professionals were constantly around. [27]

In view of this, it is important that the nurse makes an effort to use creativity and other means of communication that help when dealing with the patient, such as using written language, gestures, drawings, illustrations and also making use of non-verbal language. Other important interventions that nursing can provide is therapeutic listening, in addition to involving the family in this process.

Nursing care with pre and post-operative laryngectomy and prevention of pharyngocutane fistula

People with laryngeal cancer at an advanced stage undergo a surgical procedure called total laryngectomy, which is a surgical procedure in which the larynx is completely removed and the airway is interrupted, this provides a complete and permanent separation of the part upper airway of the lower, resulting in loss of voice and smell. [28]

Care for laryngectomized patients must be comprehensive, with an evidence-based practice to provide better planning and effective implementation of care, combined with clinical competence and the interpersonal relationship of the nurse with the patient. Some complications were mentioned in the studies, such as impaired swallowing, altered oral mucosa and risk for aspiration, due to complications with laryngectomy. Therefore, nursing care is necessary, such as keeping the head high, performing oral hygiene correctly and taking care of the tube. [29]

It is important to maintain the care with the surgical wound and measures to prevent infections, as well as care for radiodermatitis caused by radiotherapy. As already mentioned, communication is an important tool throughout the treatment process, in which the nurse must pay attention to explaining to the patient what the procedure he will be undergoing, as well as answering his possible doubts about the surgery and educating for self-care. [30]

State that nursing care in the postoperative period of laryngectomy helps in the early detection of complications and favors the implementation of interventions to minimize these effects. The most common complication is the appearance of a pharyngocutaneous fistula, characterized by an opening in the pharyngeal layer, which allows the escape of saliva and its contact with the surgical wound and the skin. [31]

Among the known risk factors for the appearance of pharyngocutaneous fistulas are preoperative radiotherapy, radical neck dissection, systemic diseases, advanced tumor staging, preoperative tracheostomy, hematoma formation, type of suture material used, blood transfusion in the transoperative period, nutritional factors and serum albumin level. [32]

The nursing care for pharyngocutaneous fistulas (FFC) found in the studies was the care with the dressing and the surgical wound, removing all necrotic tissue, taking care of the probe, feeding oral late to reduce fistula formation. [33] Nurses can act in the postoperative period of patients with FFC in order to avoid complications and thus reduce the risk of infections, length of stay, hospital expenses and improvement in quality of life. [34]

IV. FINAL CONSIDERATIONS

Based on this research, it is concluded that preventive actions are essential to reduce the number of cases and deaths, as well as the early diagnosis of laryngeal cancer. Health in Brazil is still focused on the cure, therefore, a large part of those affected by laryngeal cancer reach health services in more advanced stages of the disease, which results in financial and social and family life losses. Nursing monitors the entire process from diagnosis, hospital stay, submission to treatments and after all that, rehabilitation and readaptation to a new condition. Primary care needs to use strategies in order to strengthen health policies, as well as promote actions to combat the consumption of alcohol and tobacco, disseminating knowledge about ways to prevent and detect the first signs and symptoms of laryngeal cancer, to achieve the target audience of this disease, which are men.

In hospital care, with regard to care for patients with laryngeal cancer, nurses should plan their care based on scientific foundations, and develop a nursing plan centered on the client, building a relationship of trust and seeking methods for the patient to achieve communicate, since nursing care is also concerned with the patient's psychological and emotional aspects.

One of the limitations of this study was the low number of national publications on the role of nursing for patients with laryngeal cancer. Thus, it is important to emphasize

the need for new experimental studies that address all nursing interventions from the primary care service to high complexity, in order to support humanized and scientific nursing care.

REFERENCES

- [1] Ferreira, G. G. C. A Epigenética e Carcinogênese. 2020. Tese de Doutorado.
- [2] Silva, C.S.M. et al. Prevalência de câncer entre usuários de um hospital localizado na região central do Rio Grande do Sul. *Revista Contexto & Saúde*, v. 15, n. 28, p. 23-27, 2015.
- [3] INCA. Instituto Nacional do Câncer. 2021. [Accessed: 09 set. 2021].
- [4] Rossi, V. C et al. Câncer de laringe: qualidade de vida e pós-tratamento. *Brazilian Journal of Otorhinolaryngology*, São Paulo, v. 80, n. 5, set/oct 2014. Available: http://www.scielo.br/scielo.php?pid=S1808-86942014000500403&script=sci_arttext&tlng=pt. [Accessed: 28 jul. 2019]
- [5] Steuer, C. et al. An update on larynx cancer. *A cancer journal for clinicians*, [S. l.], 29 nov. 2016. Available: <https://onlinelibrary.wiley.com/doi/full/10.3322/caac.21386>. [Accessed: 28 jul. 2019]
- [6] Marques, M.U.E.D.B. Análise de conteúdo. Clube de Autores. 2021.
- [7] Silva, E.G. Pacientes com câncer de laringe no nordeste: intervenção cirúrgica e reabilitação fonoaudiológica. *Revista CEFAC Speech, Language, Hearing Sciences and Education Journal*, Recife, 24 out. 2016. Available: <http://dx.doi.org/10.1590/1982-021620161814915>. [Accessed: 28 jul. 2019]
- [8] Pereira, I Figueiredo et al. Neoplasias malignas em região de cabeça e pescoço: perfil dos pacientes atendidos na UFMG. *Revista Cubana de Estomatología*, v.53, n.4 Minas Gerais, 2017. Available: <http://www.revestomatologia.sld.cu/index.php/est/article/view/1013/319>. [Accessed: 28 jul. 2019]
- [9] Stewart, B. et al. Cancer prevention as part of precision medicine: plenty to be done. *Oxford Journals Carcinogenesis*, v.37, n.1, pg 2-9, [S. l.], janeiro 2016. Available: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4700936/>. [Accessed: 28 jul. 2019]
- [10] Sharp, P. Men's Perspectives of a Gender-Sensitized Health Promotion Program Targeting Healthy Eating, Active Living, and Social Connectedness. *American Journal of Men's Health*, [S. l.], 20 set. 2018. Available: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6199449/>. [Accessed: 28 jul. 2019]
- [11] Schlichthorst, M. Why do men go to the doctor? Socio-demographic and lifestyle factors associated with healthcare utilisation among a cohort of Australian men. *BMC Public Health*, [S. l.], 31 out. 2016. Available: <https://bmcpubhealth.biomedcentral.com/articles/10.1186/s12889-016-3706-5>. [Accessed: 28 jul. 2019].
- [12] Challinor, J.M. Nursing's Potential to Address the Growing Cancer Burden in Low- and Middle- Income Countries. *Journal of Global Oncology*, [S. l.], 3 jun. 2016. Available: <https://ascopubs.org/doi/full/10.1200/JGO.2015.001974>. [Accessed: 28 jul. 2019]
- [13] Celebi, O. Human papillomavirus infection in patients with laryngeal carcinoma. *BMC Cancer*, [S. l.], 20 out. 2018. Available: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6195980/>. [Accessed: 28 jul. 2019].
- [14] Oliveira, P.P. Processo de enfermagem para homens com câncer de laringe fundamentado no modelo de Neuman. *Enfermería Global*, São Paulo, 2017. Available: http://scielo.isciii.es/pdf/eg/v16n45/pt_1695-6141-eg-16-45-00188.pdf. [Accessed: 28 jul. 2019]
- [15] Delaney, Geoff et al. The role of radiotherapy in cancer treatment. *ACS Journal*, [s. l.], v. 104, n. 6, 3 ago. 2005. DOI <https://doi.org/10.1002/cncr.21324>. Available: <https://acsjournals.onlinelibrary.wiley.com/doi/full/10.1002/cncr.21324>. [Accessed: 22 set. 2021]
- [16] Silveira, M.S.; Goulart, B.N.G.; Almeida, C.P.B. Tratamento do câncer de laringe: revisão da literatura publicada nos últimos dez anos. *Revista Cefac*, [s. l.], v. 17, n. 4, 2015. DOI <https://doi.org/10.1590/1982-0216201517414113>. [Accessed: 22 set. 2021]
- [17] Luz, K.R. et al. Estratégias de enfrentamento por enfermeiros da oncologia na alta complexidade. *REBEN*, v.69, n.1, pg 67-71, Porto Alegre, Jan/Fev 2016. Available: <http://www.scielo.br/pdf/reben/v69n1/0034-7167-reben-69-01-0067.pdf>. [Accessed: 28 jul. 2019]
- [18] Reis, Karine Marques Costa dos. O cuidado paliativo baseado no conforto. 2021. Available: <https://repositorio.unb.br/handle/10482/41257> [Accessed: 22 set. 2021]
- [19] Santos, A.G. et al. O cuidado em enfermagem analisado segundo a essência do cuidado de Martin Heidegger. *Revista Cubana de Enfermería*, [s. l.], v. 33, n. 3, 2017. Available: <http://www.revenfermeria.sld.cu/index.php/enf/article/view/1529/295>. [Accessed: 22 set. 2021].
- [20] San José, P.G. Cuidados de enfermagem em el paciente laringectomizado. 2016. Trabalho de Conclusão de Curso (Graduação em Enfermagem) - Acadêmica, Valladolid, 2016. Available: <https://uvadoc.uva.es/bitstream/10324/24661/1/TFG-H-930.pdf>. [Accessed: 28 jul. 2019]
- [21] Kornhaber, R et al. Enhancing adult therapeutic interpersonal relationships in the acute health care setting: an integrative review. *Journal of Multidisciplinary Healthcare*, Londres, 14 out. 2016. Available: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5072574/>. [Accessed: 28 jul. 2019]
- [22] Board. Laryngeal Cancer Treatment (Adult) (PDQ®) Health Professional Version. [S. l.], 17 maio 2019. Available: <https://www.ncbi.nlm.nih.gov/books/NBK65746/>. [Accessed: 28 jul. 2019].
- [23] Matos, R.E. et al. Dificuldades de comunicação verbal do cliente laringectomizado. *Revista Enfermagem*

- UERJ,v.17,n.2, pg 176-81, Rio de Janeiro, Abr/Jun 2009. Available: <http://www.facenf.uerj.br/v17n2/v17n2a06.pdf>. [Accessed: 28 jul. 2019]
- [24] Ishibashi, Y. et al. The Relationship Between the Means of Communication and a Self-Help Group for Laryngectomized Patients. Virginia Henderson Global Nursing and Repository, [S. l.], 24 jul. 2016. Available: <https://sigma.nursingrepository.org/handle/10755/616394>. [Accessed: 28 jul. 2019]
- [25] Kourkouta, L.; Papathanasiou, I.V. Communication in Nursing Practice. Mater Sociomed, [s. l.], 20 fev. 2014. DOI <https://dx.doi.org/10.5455/2Fmsm.2014.26.65-67>. [Accessed: 22 set. 2021].
- [26] Frade, A. Specialized nursing interventions in optimizing patient communication undergoing total laryngectomy. Annals of Oncology ESMO 2018 Congress, [S. l.], [Accessed: 28 jul. 2019]. Available: <https://oncologypro.esmo.org/Meeting-Resources/ESMO-2018-Congress/EONS-Poster-Specialized-nursing-interventions-in-optimizing-patient-communication-undergoing-total-laryngectomy>. [Accessed: 27 maio 2019].
- [27] Tolotti, A. et al. The communication experience of tracheostomy patients with nurses in the intensive care unit: A phenomenological study. Intensive and critical care nursing, [S. l.], Jun 2018. Available: <https://www.ncbi.nlm.nih.gov/pubmed/29709466>. [Accessed: 28 jul. 2019]
- [28] Ceachir, O.; Hainarosie, R.; Zainea, V. Total Laryngectomy: Past, Present, Future. Maedica a journal of clinica medicine, [S. l.], v. 2, n 19, p 210-216, 9 jun. 2014. Available: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4296768/>. [Accessed: 28 jul. 2019].
- [29] Santana, M. E.; Sawada, N. O. Fístula faringocutânea após laringectomia total: revisão sistemática. Revista Latino americana de enfermagem, São Paulo, v. 4 n.16, jul/ago 2008. Available: http://www.scielo.br/pdf/rlae/v16n4/pt_19.pdf. [Accessed: 28 jul. 2019]
- [30] Khanh, N. T. Management of post-operative fistula in head and neck surgery: Sweeping it under the carpet?. World journal of otorhinolaryngology, v. 5, n. 4, p 93-104, USA, 28 nov. 2015. Available: <https://www.wjnet.com/2218-6247/full/v5/i4/93.htm>. [Accessed: 28 jul. 2019]
- [31] Cocato, A.C. de F. et al. Fatores de risco da fístula faringocutânea em pacientes laringectomizados. Revista da Associação Brasileira de Estomoterapia, v.13 n.3, São Paulo, 2015. Available: <https://www.revistaestima.com.br/index.php/estima/article/view/109>. [Accessed: 28 jul. 2019]
- [32] Dedivitis, R. et al. Pharyngocutaneous fistula following total laryngectomy. ACTA Otorhinolaryngologica Italica, Itália, v.27, n.1, fev. 2007. Available: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2640019/>. [Accessed: 28 jul. 2019]
- [33] SILVA, Gulnar Azevedo e et al. Detecção precoce do câncer de mama no Brasil: dados da Pesquisa Nacional de Saúde, 2013. Revista de Saúde Pública, [s. l.], v. 51, n. 1, 2017. DOI <https://doi.org/10.1590/S1518-8787.2017051000191>. Disponível em: <https://www.scielo.br/j/rsp/a/tCdChWmsFnbdMdL9mFbDX5r/?lang=pt&format=pdf>. Acesso em: 22 set. 2021.
- [34] Lenza, N. F. B. et al. Fístula Faringocutânea em Paciente Oncológico: Implicações para a Enfermagem. Revista Brasileira de Cancerologia, v.59 n.1 pg 87-94, São Paulo, 11 ago. 2019. Available: <https://pdfs.semanticscholar.org/63ad/8e76dc79e8bd0b10b3b0ab30dd9ec7e0fb7c.pdf>. [Accessed: 28 jul. 2019]